

SN 10/068,814
Page 3

AMENDMENTS AND LISTING OF CLAIMS

1. (Currently Amended) A head suspension or head suspension component for use in supporting a read/write head in a storage device, the head suspension or head suspension component comprising an integrated circuit chip as a structural element providing substantial structural support to of the head suspension or head suspension component.
2. (Original) The head suspension or head suspension component of claim 1, wherein the chip is an electrical element of the head suspension or head suspension component.
3. (Original) The head suspension or head suspension component of claim 2, wherein the chip is electrically connected between the read/write head and externally located electrical components.
4. (Original) The head suspension or head suspension component of claims 1, further comprising a load beam that includes the chip.
5. (Original) The head suspension or head suspension component of claim 4, wherein the load beam comprises a first portion and a second portion, with the first portion coupled to one end of the chip and the second portion coupled to an opposite end of the chip.
6. (Original) The head suspension or head suspension component of claim 5, wherein the first portion comprises a mounting region and a spring region.
7. (Original) The head suspension or head suspension component of claim 6, wherein the spring region includes an aperture.
8. (Original) The head suspension or head suspension component of claims 6, wherein the spring region includes a radiused bend.
9. (Original) The head suspension or head suspension component of claims 5, wherein the second portion of the load beam comprises a flexure attachment region.

SN 10/068,814
Page 4

10. (Original) The head suspension or head suspension component of claim 9, further comprising a flexure and wherein the flexure mounts to the flexure attachment region of the second portion.

11. (Original) The head suspension or head suspension component of claim 4, further comprising a flexure and wherein the flexure mounts to the chip.

12. (Original) The head suspension or head suspension component of claim 1, further comprising at least one electrical trace.

13. (Original) The head suspension or head suspension component of claim 12, wherein the trace comprises a first portion and a second portion, the first portion electrically connected between an externally located electrical component and the chip, and the second portion electrically connected between the read/write head and the chip.

14. (Original) The head suspension or head suspension component of claim 1, wherein the chip comprises a gimballing dimple.

15. (Original) The head suspension or head suspension component of claim 1, wherein the chip contacts a gimballing dimple.

16. (Original) The head suspension or head suspension component of claim 1, wherein the chip comprises a head lift limiter.

17. (Currently Amended) The head suspension or head suspension component of claim 1, wherein the chip is a stiffening member for that provides substantial stiffness to the head suspension or head suspension component.

18. (Currently Amended) The head suspension or head suspension component of claim 1, wherein the chip comprises a shape configured to enhance the performance dynamic response of the head suspension or head suspension component.

SN 10/068,814
Page 5

AM
C/N 2

19. (Currently Amended) The head suspension or head suspension component of claim 18, wherein the shape comprises a cross-sectional profile aerodynamically configured to reduce vibration of the head suspension or head suspension component.

20. (Currently Amended) The head suspension or head suspension component of claim 18, wherein the shape comprises a cross-section profile aerodynamically configured to reduce wind drag of the head suspension or head suspension component.

21. (Currently Amended) The head suspension or head suspension component of claim 1, wherein the chip comprises an external surface configured ~~to increase heat dissipation from the chip~~ as a heat dissipation structure.

22. (Canceled)

23. (Currently Amended) The head suspension or head suspension component of claim 1, wherein the chip comprises engaging structure configured ~~for attachment to mechanically engage with~~ to a head suspension component.

24. (Canceled)

25. (Currently Amended) The head suspension or head suspension component of claim ~~24~~ 23, wherein the ~~internally formed~~ engaging structure comprises at least one of holes, slots, depressions, indentations and grooves.

26. (Currently Amended) The head suspension or head suspension component of claim 23, wherein the engaging structure is externally protruding from the chip.

27. (Original) The head suspension or head suspension component of claim 26, wherein the externally protruding structure comprises at least one of tabs, rails, rods, posts, knobs, loops and resonance whiskers.

28. (Original) The head suspension or head suspension component of claim 1, wherein the chip is welded to a head suspension component.

SN 10/068,814

Page 6

29. (Original) The head suspension or head suspension component of claim 1, wherein the chip is adhered to a head suspension component.

30. (Original) The head suspension or head suspension component of claim 1, wherein the chip is mechanically fastened to a head suspension component.

31. (Original) The head suspension or head suspension component of claim 1, further comprising a MEMS device and wherein the chip is coupled to the MEMS device.

32. (Original) The head suspension or head suspension component of claim 1, wherein the chip comprises a head lift component.

33. (Currently Amended) The head suspension or head suspension component of claim 32, wherein the head lift component is integrally formed from the chip material.

34. (Original) The head suspension or head suspension component of claim 32, wherein the head lift component is attached to the chip.

35. (Currently Amended) A method of making a head suspension or head suspension component for use in supporting a read/write head in a storage device, the method comprising the steps of:

providing a head suspension or head suspension component; and
mounting an integrated circuit chip as a structural element of the head suspension or head suspension component so that the chip provides substantial structural support to the head suspension or head suspension component.

36. (Original) The method of claim 35, further comprising the step of electrically connecting the chip to control electronics for the read/write head.

37. (Original) The method of claim 35, further comprising the step of electrically connecting the chip to the read/write head.

SN 10/068,814

Page 7

A1
C/ind

38. (Original) The method of claim 35, wherein the head suspension comprises a load beam, and wherein the step of mounting comprises the step of coupling the chip to the load beam.

39. (Original) The method of claim 38, wherein the load beam further comprises first and second portions, and wherein the step of coupling comprises coupling the chip between the first and second portions of the load beam.

40. (Currently Amended) The method of claim 35, further comprising the step of configuring an integrated circuit chip for enhanced ~~performance~~ dynamic response of the head suspension or head suspension component prior to mounting the chip.
